Department of Health and Human Services Public Health Service

Small Business Innovation Research Program Phase II Grant Application

			OMB No. 0925-0195	
			Expiration Date 2/28/98	
Leave blank — f	or PHS use only.			
Туре	Activity	Number		
Review Group		Form	Formerly	
Council Board (Month, year)		Date Received		
		•	1b. Phase I Grant No.	
/ESTIGATOR New Investigator		ew Investigator		

Follow instructions carefully.	Counci	1 000	aid (iiio	min, year)	Date	received	
1a. TITLE OF APPLICATION (Do not exceed 56 typewriter spaces)						1b. Phase I Grant I	No.
2. PRINCIPAL IN	VESTIG	ΔΤΟ)B		□ N4	ew Investigator	
2a. NAME (Last, first, middle)			REE(S)			CIAL SECURITY NO	о .
(1					
2d. POSITION TITLE	2e. M/	AILII	NG ADI	DRESS (Street, o	city, sta	te, zip code)	
2f. TELEPHONE AND FAX (Area code, number, and extension)							
TEL:	BITNET	/INTE	ERNET A	ddress:			
FAX:	<u> </u>						
3. HUMAN 3a. If "yes," Exemption no. SUBJECTS or 3b. Assurance	,		VERTE ANIMAI	BRATE 4a. If "Y LS IAC			
Compliance	I .		,	app	roval	4b. Animal welfare assurance no.	
Expedited		\vdash	NO YES	date	;	assurance no.	
5. DATES OF ENTIRE PROPOSED 6. COSTS REQUESTED FOR	FIRST 1	2-M	_	7 COSTS REC	NIESTI	 ED FOR ENTIRE	
PHASE II PERIOD BUDGET PERIOD		Z 1V1		PROPOSED			
From: 6a. Direct Costs 6b. Total 0	Costs			7a. Direct Costs		7b. Total Costs	
Through: \$				\$		\$	
8. PERFORMANCE SITES (Organizations and addresses)				RGANIZATION (concern)	Name a	and address of appli	cant
	Silia	iii DC	<i>13111033</i>	concerny			
	10. EN	ITIT'	Y IDEN	ITIFICATION NU	MBER	Congressional Dist	trict
	12. SM	1ALI	L BUSII	NESS CERTIFIC	ATION	•	_
11. INVENTIONS AND PATENTS Previously reported OR] Sr	_	siness Concern		Women-owned	
NO YES If "Yes," Not previously reported	1 45 05			ially and Econom			
13. NOTICE OF PROPRIETARY INFORMATION: The information identified by asterisks(*) on pages of this application			IAL SIC	SNING FOR APP	LICAN	T ORGANIZATION	
constitutes trade secrets or information that is commercial or financial and	Tialle.						
confidential or privileged. It is furnished to the Government in confidence with the understanding that such information shall be used or disclosed only for	1	88.					
evaluation of this application, provided that, if a grant is awarded as a result of							
or in connection with the submission of this application, the Government shall have the right to use or disclose the information herein to the extent provided							
by law. This restriction does not limit the Government's right to use the							
information if it is obtained without restriction from another source.							
14. DISCLOSURE PERMISSION STATEMENT: If this application does not							
result in an award, is the Government permitted to disclose the title only of your proposed project, and the name, address, and telephone number of the	(Lolobii	one):				
official signing for the applicant organization, to or-	FAX:	T /IN	ITEDAII	T A d door o			
ganizations that may be interested in contacting you YES NO for further information or possible investment?	BITINE	1/IIN	NIEKINI	ET Address:			
16. PRINCIPAL INVESTIGATOR ASSURANCE: I certify that the statements	SIGNA	TIII	PE OF	PERSON NAME	D IN 2a	n DATE	
herein are true, complete, and accurate to the best of my knowledge. I am	(In ink.			ature not accepta			
aware that any false, fictitious, or fraudulent statements or claims may subject							
me to criminal, civil, or administrative penalties. I agree to accept responsibility for the scientific conduct of the project and to provide the required progress							
reports if a grant is awarded as a result of this application.							
17. APPLICANT ORGANIZATION CERTIFICATION AND ACCEPTANCE: I certify that the statements herein are true, complete, and accurate to the				PERSON NAME ature not accepta		DATE	
best of my knowledge, and accept the obligation to comply with Public Health	· `		. Jigin				
Service terms and conditions if a grant is awarded as a result of this applica-	-						
tion. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties.	3						
DUS 6246 2 (Pay 1/05)	1						

Principal Investigator (Last, first, middle):	

Abstract of Research Plan

NAME. ADDRESS.	AND TELEPHONE NUMBER	OF APPLICANT ORGANIZATION

YEAR FIRM FOUNDED	NO OF EMPLOYE	ES (include all affiliates)
TEAR FIRM FOUNDED	NO. OF EMPLOYE	EES (include all affiliates)
TITLE OF APPLICATION		
KEY PERSONNEL ENGAGED ON PROJECT	Т	
NAME	ORGANIZATION	ROLE ON PROJECT
ABSTRACT OF RESEARCH PLAN: State	the application's broad, long-term objectives	and specific aims, making reference to the health- eving these goals and discuss the potential of the
research for technological innovation. Avoid s	summaries of past accomplishments and the us	se of the first person. This abstract is meant to serve
as a succinct and accurate description of the	proposed work when separated from the applic , do not include proprietary or confidential	ation. If the application is funded, this description, as information, DO NOT EXCEED 200 WORDS
ic, iiii sooono pasio iiiomaaoni <i>mororo</i>	, ao not moidad propriotally di deimaonila.	me mane in de Nei Exella 200 Weixas.
Provide key words (8 maximum) to identify the	ne research or technology.	
Provide a brief summary of the potential com	mercial applications of the research.	
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	i ago z	

Small Business Innovation Research Program Phase II Grant Application Table of Contents

Number pages consecutively at the bottom throughout the application. Do not use suffixes such as 5a, 5b. Type the name of the Principal Investigator at the top of each printed page and each continuation page.

	Page Numbers
Face Page, Abstract, Table of Contents	1–3
Detailed Budget for First 12-Month Budget Period	
Budget for Entire Proposed Phase II Period	
Budgets Pertaining to Contractual Arrangements	
Biographical Sketch—Principal Investigator (Not to exceed two pages)	
Other Biographical Sketches (Not to exceed two pages for each)	
Other Support	
Resources	
Research Plan	
Introduction to Revised Application (Not to exceed one page)	
1. Specific Aims	(
2. Significance	
3. Phase I Final Report (Recommended not to exceed ten pages) (Not to exceed 25 pages*)	1
4. Experimental Design and Methods	
5. Human Subjects	
6. Vertebrate Animals	
7. Consultants	
8. Consortium Arrangements	
9. Literature Cited	
Checklist	
*Type density and type size of the entire application must conform to limits provided in application instructions under "Type Size	٠."
Appendix (Three sets. No page numbering necessary for Appendix.)	
Number of publications and manuscripts accepted for publication (Not to exceed ten):	
Other items (list):	

Principal Investigator (Last, first, middle):

PERSONNEL (Applicant organization only) NAME Role on Project NAME Role on Project NAME Role on Project NAME Role on Project Salary Role on Role on Role on Project Salary Role on R	Detailed Budge	et for First 12-N Direct Costs		udget l	Period—	FROM	ТО	
NAME Role on Appt. Salary Requested Renefits NAME Role on Appt. Role on Project Requested Requested Requested Renefits TOTALS	PERSONNEL (Applicant or			0/6	I	DOLLAR AMO	LINT PEOLIE	STED (omit cents)
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I D	FIXED FEE REQUESTED						5	<u> </u>

Budget for Entire Proposed Phase II Period— Direct Costs and Fixed Fee

BUDGET CATEGORY TOTALS		FIRST BUDGET PERIOD (from Page 4)	SECOND BUDGET PERIOD	THIRD BUDGET PERIOD (if necessary)
PERSONNEL (Salary and f (Applicant organization only				
CONSULTANT COSTS				
EQUIPMENT				
SUPPLIES				
TRAVEL				
	INPATIENT			
PATIENT CARE COSTS	OUTPATIENT			
ALTERATIONS AND RENC	OVATIONS			
CONTRACTUAL COSTS				
OTHER EXPENSES				
Total Direct Costs				
Total Direct Costs for Entire Proposed Pha		so enter on Face Page, Item 7	a)	

JUSTIFICATION: Describe the specific functions of the personnel and consultants. For ALL years, justify any unusual items such as major equipment, foreign travel, alterations and renovations, patient care costs, and contractual costs. Identify with an asterisk any significant increases or decreases from the first budget period and explain and justify all categories marked with an asterisk. Justify any request that exceeds the overall SBIR Phase II limitations of cost (\$750,000) and period of support (two years). Use continuation page(s) if necessary.

BUDGET CATEGORY TOTALS	FIRST BUDGET PERIOD (from Page 4)	SECOND BUDGET PERIOD	THIRD BUDGET PERIOD (if necessary)
Fixed Fee Requested			
Total Fixed Fee Requested for	•		

Entire Proposed Phase II Period (Add to "total direct costs for entire proposed phase II period" above and "indirect costs for entire proposed phase II period" from Checklist [form page 9] and enter new total on Face Page, Item 7b.)

\$

	Principal Investigator (Last, first, middle):
-	Biographical Sketch
	Provide the following information for the key personnel listed on Page 2, beginning with the Principal Investigator. Photocopy this page or follow this format for each person.

NAME	POSITION TITLE			
EDUCATION/TRAINING (Begin with baccalaureate or other initial prof	essional education. I	nclude postdoctoral	training.)	
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR CONFERRED	FIELD OF STUDY	

RESEARCH AND/OR PROFESSIONAL EXPERIENCE: Concluding with present position, list in chronological order previous employment, experience, and honors. Include present membership on any Federal Government public advisory committee. List, in chronological order, the titles, authors, and complete references to those publications most pertinent to this application. **DO NOT EXCEED TWO PAGES.**

Principal Investigator (Last, first, middle):	
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Other Support

(Use continuation pages if necessary. Include the Principal Investigator's name at the top and number consecutively.)

FOLLOW INSTRUCTIONS CAREFULLY. Incomplete, inaccurate, or ambiguous information could lead to significant delays in the review and/or possible funding of this application. OTHER SUPPORT is defined as *all financial resources*, whether Federal, non-Federal, commercial, or institutional, *available in direct support of an individual's research endeavors*, including, but not limited to, research grants, cooperative agreements, contracts, and/or institutional awards. DO NOT INCLUDE TRAINING AWARDS, PRIZES, OR GIFTS.

Information on active and pending OTHER SUPPORT is required for *each* of the key personnel listed on Page 2, *excluding* consultants. Indicate "None" for individuals with no active or pending support. DO NOT SUBMIT a separate page for each person listed for whom "None" is indicated. List OTHER SUPPORT in two separate groups: (1) *all* currently active support, and (2) *all* applications and proposals pending review *or* funding *(do not include this application)*. In a separate group, *list any other active or pending support to the applicant organization (small business concern) for work related to this project*. For all groups, specifically identify projects under the Small Business Innovation Research (SBIR) program and the Small Business Technology Transfer (STTR) program. If the support is provided under a subcontract arrangement or is part of a multi-project award, identify the principal investigator and provide the data below for both the parent and the subproject.

For each item, provide: (a) source of support, identifying number, title, and inclusive dates of the project as approved (for *active* awards) or proposed (for *pending* support); (b) brief statement of overall objectives of the project, subproject, or subcontract; (c) *annual* direct costs as approved or proposed; and (d) percentage of effort on the project. After listing all OTHER SUPPORT, summarize for each individual any potential overlap with active or pending projects and *this* application in terms of the science, budget, or an individual's committed effort. (See instructions for definitions of the three types of overlap.) Any necessary resolution of overlap due to this application being funded will occur in conjunction with the applicant organization and the Public Health Service awarding component staff at the time of award.

Principal Investigator (Last, first, middle):			
Resources			
FACILITIES: Specify the facilities to be used for the conduct of the proposed research. Indicate the facilities at the applicant small business concern and any other performance site listed on the FACE PAGE where the facilities are located and describe their capacities, pertinent capabilities, relative proximity, and extent of availability to the project. Under "Other," identify support services such as			

secretarial, machine shop, electronics shop, and the extent to which they will be available to the project. Use continuation page(s) if necessary.
Laboratory:
Clinical:
Animal:
Computer:
Office:
Others
Other:
MAJOR EQUIPMENT: List the most important equipment items already available for this project, noting the location and pertinent capabilities of
each.

(Form Page 8) Page _____

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	Principal Investigator (L	ast, first, mide	dle):
	Chec	klist	
	This is the required last	page of the	application.
TYPE OF APPLICATION (Check ap	propriate box[es].)		
NEW application. (This application	on is being submitted to the Public	: Health Servio	ee for the first time.)
REVISION of previously-submitte (This application replaces a prior	ed application number r unfunded version of a new applic	eation.)	
CHANGE of Principal Investigate Name of former Principal Investi			
1. ASSURANCES/CERTIFICATIONS	3		
The assurances/certifications set forth the signature of the OFFICIAL SIGNI ZATION (small business concern) on tion. Descriptions of individual assurapplication instructions under "Check ance with any item, provide an explanation".	NG FOR APPLICANT ORGANÍ- the FACE PAGE of the applica- ances/certifications are found in clist." If unable to certify compli-	sion; • Drug • Research I Individuals (bjects; • Vertebrate Animals; • Debarment and Suspen-Free Workplace; • Lobbying; • Delinquent Federal Debt Misconduct; • Civil Rights (Form HHS 690); • Handicapped Form HHS 690); • Age Discrimination (Form HHS 690) Conflict of Interest.
2. PROGRAM INCOME (See discuss	ion in application instructions unde	er "Checklist."	")
All applications must indicate (Yes or	No) whether program income is ar	nticipated duri	ng the period for which grant support is requested.
No Yes (If "Yes," us	se the format below to reflect the a	mount and so	urce(s) of anticipated program income.)
Budget Period	Anticipated Amount		Source(s)
3 INDIRECT COSTS (See discussion	n in application instructions under	"Chacklist ")	
3. INDIRECT COSTS (See discussion	• •		aggination should also be prepared to furnish financia
Insert the rate, if known. If the applicant organization does not have a currently negotiated rate with the Department of Health and Human Services (DHHS) or another Federal agency, it must estimate the amount of indirect costs allocable (applicable) to the proposed Phase II project. That amount should be inserted in the space provided below. The			
DHHS agreement, dated:			No indirect costs requested.
No DHHS agreement, but rate es	stablished with		, dated:
Rate negotiation pending with the	e National Institutes of Health.		
CALCULATION*			
(The entire grant application, including Supplying the following information of	•	l and provided	to peer reviewers as CONFIDENTIAL information.
a. First 12-month budget period:			
Amount of base \$b. Entire proposed Phase II period:	x Rate applied _		% = indirect costs (1) \$
(1) Add to "tot	al direct costs" and "fixed fee requ	ested" from fo	% = indirect costs (2) \$mrm Page 4 and enter new total on Face Page, Item 6b. rrm Page 5 and enter new total on Face Page, Item 7b.
Salary and wages base	Modified total direct cos	its base	Other base (Explain on separate page.)
Off-site other special rate or mo	ore than one rate involved (Explain	on senarate	nage)

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(Form Page 9) Page ____

4. SMOKE-FREE WORKPLACE

Does your organization currently provide a smoke-free workplace and/or promote the non-use of tobacco products or have plans to do so?

No (The response to this question has no impact on the review or funding of this application.)